REMARKS

I. Claim Status:

Claims 1 and 3-10 are pending. Claim 2 has been canceled. Claims 1 and 3-9 stand rejected. Claim 10 has been allowed. Claim 1 has been amended to more particularly point out and distinctly claim that which the Applicants' regard as their invention. Specifically, claim 1 has been amended to clarify that the second width of the plate mechanically contacts the second portion of the preforms so as to mechanically "hook" the preforms for mechanical extraction. Support for the amendment is found throughout the specification and drawings. No new matter is added by this amendment. Entry and consideration of claim 1, as amended, are respectfully requested.

II. Claim Objections:

Claim 2 has been objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claim 2 has been canceled thereby rendering the objection thereof moot.

III. Rejections under 35 U.S.C. § 103(a):

Claims 1 and 3-9 stand rejected as being obvious over Coran (U.S. Pub. No. 20030003187) in view of Chen (U.S. Pat. No. 6,391,244). Claim 2 was rejected based on the same references. As claim 2 has been canceled, the rejection thereof is moot. Applicants respectfully traverse the remaining rejections.

Applicants' invention, as claimed, includes a preform *extraction* device for extracting preforms from a turret designed to receive and maintain preforms in attached conditioning cavities to allow the preforms to cool for further processing

after extraction. The claimed preform extracting device comprises a supporting structure 20 to which a table 21 is attached. A plate 23 is *fixed* to table 21. Plate 23 includes a gripping means in the form of a series of parallel-oriented straight slits each having two sections of differing predetermined widths. The first width is dimensioned to receive the entire proportions of a preform. The second width is dimensioned to be larger than the width of the preform body, but smaller than the dimensions of a ring 9 formed about a neck or end of the preform.

To extract a preform, the turret is lowered toward plate 23. Plate 23 is oriented so the preform is positioned over the first width section of a slit. The turret is lowered sufficiently to position the ring 9 below the plane of plate 23. Plate 23 is then moved laterally by control and operating means so that ring 9 is now positioned below the second width section of the slit. Plate 23 is next moved away from the turret, which causes the surfaces defining the second width section of the slit to register against ring 9 of the preform so as to "hook" the preform. Continued movement of plate 23 away from the turret urges the preform out of the conditioning cavities. Once dislodged from the conditioning cavity, the preform falls freely through plate 23 via gravity.

Coran neither shows nor suggests the noted features of Applicants' invention as claimed. Coran discloses an invention to improve the efficiency of a preform molding and curing device by combining the functions of retrieving and cooling down performs in a series of coordinated, overlapping steps using preform deposit patterns in a turret constructed with repeating patterns of conditioning cavities.

Coran employs a translating element, designated 2, which includes two plates, designated 13 and 14, that combined function as a guillotine [pg. 3, ¶ 0056]. Top plate 13 has flanged apertures for receiving *falling* preforms. Lower plate 14

has button-hole shaped apertures with two different diameters. A first portion 16 is dimensioned to receive the preform body, but is smaller than the cross-section dimension of the preform neck. A second portion 17 is dimensioned to be larger than the preform body and neck [pg. 3 ¶ 0057-0058].

Translating element 2 performs the function of holding or supporting the preforms prior to being positioned and secured in the conditioning cavities. The preforms are loaded into element 2 via gravity. The flanged apertures of top plate 13 help to center the preforms in the apertures of element 2. Bottom plate 14 is positioned initially laterally to *hold* the preform necks in the first portion. When the conditioning cavities are ready for loading, bottom plate 14 is moved laterally relative to top plate 13 so that second portion 17 is aligned with the top plate 13 apertures, which allows the preforms to *fall* into the conditioning cavities via gravity. Accordingly, translating element 2 *does not* perform the function of *extracting* the preforms.

Neither translating element 2, nor its components, top plate 13 and bottom plate 14, are configured to move toward or away from the Coran turret, designated 3. Gravity, rather than reciprocal movements of translating element 2 and/or turret 3 toward or away from each other, is responsible for moving the preforms from the molding apparatus to the conditioning cavities. Coran does not disclose a control and operating means for moving plate 2 away from turret 3. See generally pg. 3, ¶¶ 0056-0060; and pg. 3, ¶ 0070 – pg. 4, ¶ 0076.

Coran does disclose a preform extracting device shown in FIGS. 22-24. Unlike Applicants' claimed invention, however, the Coran extracting device includes two plates (described as planes) connected at a pivot point and having symmetrical apertures that receive and register against the preforms when pivoted away from

each other. When pivoted toward each other, the apertures align with the cavities 18 and the preforms so as to allow the preforms to fully seat in the cavities with gravity. A vacuum is applied to retain the preforms in the cavities.

More specifically, the plates, designated 30 and 33, are joined at a pivot point and are articulated by a pneumatic compressor in a scissor-like fashion. The lower plate 33 includes a series of spring nails that contact the ends of the preforms and maintain the preforms in the cavities 18 should the vacuum fail to do so when the preform/cavity assemblies are inverted via turret rotation.

To disengage the preforms from the cavities 18, the plates, 30 and 33, are pivoted away from each other. This causes the portion defining the apertures of plate 30 to register against the preforms and urge them out of the cavities as the apertures are displaced relative to the preforms due to the arcuate path followed by the pivoting plates. At no time are the neck portions of the preforms "hooked" by the plate apertures. The plates do not move laterally to "hook" the preforms. The drawings of Coran suggest a friction type engagement, not a mechanical one. See generally pg. 4, ¶ 87 – pg. 5, ¶ 97.

The deficiencies of Coran are not resolved by Chen. Chen neither shows nor suggests many of the claimed features absent from Coran. Chen does not disclose an extracting device, but a retaining/blocking device to prevent preforms from exiting cooling cavities after partial removal or displacement from the cavities with positive air pressure to urge the preforms out of the cavities. As such, Chen is best characterized as disclosing a pneumatically driven extraction system.

The primary problem addressed by Chen concerns the incomplete extraction of preforms from a plurality of cavities when positive air pressure is used as the extraction force. When multiple preforms are being removed simultaneously with air

pressure, some preforms often are ejected before others that may stick more aggressively to the preform cavities. If some preforms exit cavities faster than others, air pressure needed to force the remaining preforms out of their cavities can be substantially depleted by exiting the empty cavities. Chen has solved this problem by creating a blocking device to prevent preforms from completely exiting the cavities so that positive air pressure can be sustained long enough to urge any sticking preforms out of their cavities.

To achieve this result, the device of Chen includes a plate 52 with a series of holes 94, each of which has two defined dimensions, a small diameter "blocking" portion 98 and a large diameter portion 96, a "pass-through" portion. Small diameter portion 98 is dimensioned to be small than a flange 88 formed on a neck of a preform. Large diameter portion 96 is dimensioned to be larger than flange 88 to allow flange 88 and the rest of the preform to pass freely therethrough [4:44-68].

As shown sequentially in FIGS. 8-12 of Chen, plate 52 is positioned above the cavities. To block the preforms from completely exiting the cavities, plate 52 is positioned so that smaller diameter portions 98 are directly above the preforms in what is termed a "closed" position. Once air pressure is introduced into the cavities and the preforms begin to migrate out of the cavities, flanges 88 register against, and rest "on top" of small diameter portions 98 via gravity. Plate 52 and holes 94 do not "hook" or mechanically grasp any portion of the preforms to extract them from the cavities. To the contrary, plate 52 and holes 94 act as a mechanical impediment to complete removal of the preforms from the cavities. In a closed position, plate 52 hinders the downward progress of the preforms, which is driven by gravity after initial extraction by the aforementioned pneumatic means.

After a period of time has passed to allow the air pressure to partially

disengage all the preforms from the cavities, plate 52 is moved laterally to an "open" position in which the large diameter portions 98 are aligned with the flanges 88. In this position, the flanges and entire preforms fall freely through holes 94 via gravity so as to completely exit the cavities [6:21-27]. In no orientation relative to the cavities and preforms do any structures on plate 52 "hook" any portions of the preforms to mechanically extract them from the cavities. The means used to extract the preforms are air pressure and gravity exclusively.

Moreover, Chen does not disclose a control and operating means to move plate 52 toward and away from the conditioning cavities. Such movement is necessary if the Chen device "hooked" the preforms for extraction by mechanical means, which it clearly does not. The device of Chen, as disclosed, is limited to moving plate 52 laterally. The absence of a control and operating means to reciprocally move plate 52 relative to the conditioning cavities is consistent with the Chen device's mode of operation—extraction of preforms exclusively with air pressure and gravity.

Absent the disclosure of any structure to mechanically engage, or "hook" and extract the preforms from the cavities, and absent a control and operating means to move plate 52 reciprocally relative to the conditioning cavities, Chen cannot properly be considered to fill the deficiencies of Coran. Furthermore, Coran cannot be combined with Chen to render Applicants' claimed invention obvious due to these glaring deficiencies in each reference.

Based on the considerable errors of interpretation, a prima facie case of obviousness has not been established. The references, as properly interpreted, do not show or suggest all the claimed features of applicants' invention, particularly the structures to mechanically hook the preforms. For all the foregoing reasons, claims

1 and 3-9 are allowable over Coran in view of Chen. Reconsideration and removal of the rejections of claims 1 and 3-9 under § 103(a) are respectfully requested.

IV. Allowed Claim:

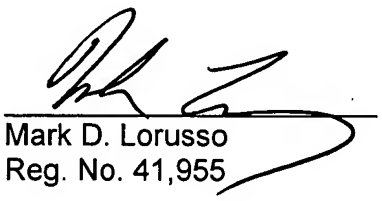
Applicants' acknowledge with appreciation the allowance of claim 10.

V. Conclusion:

For all the foregoing reasons, the claims are considered to define patentably over the prior art. Reconsideration is requested and favorable action is solicited.

Respectfully Submitted,

LORUSSO & ASSOCIATES



Mark D. Lorusso
Reg. No. 41,955

Dated: June 29, 2009

PO Box 21915
Portsmouth, NH 03802
Tel.: 603 427-0070
Fax: 603 427-5530
Email: mlorusso@loriplaw.com